



# *Wheel balancers*

*Approved by Volkswagen AG*



## Wheel balancers



### VAS 6307

- Includes the patented virtual plane measurement technique (**VPM**) which ensures accurate results and which is insensitive to ambient conditions.
- Large monitor-like LC display using pictorials for intuitive and optimised operator guidance.
- Optimum work place with functional design including large weight tray and integrated shelves for clamping adaptors.
- Automatic input of distance rim/machine, rim diameter and rim width with the **3D SAPE** gauge arm.
- Easy and accurate relocation of weight position and fitting of adhesive weights inside the rim owing to the KPS weight positioning system with wheel weight clamp.
- The split-weight mode (**HSP**) allows the operator to hide the outer adhesive weights in spoked alloy rims. Machine shaft and consequently the wheel can be retained in position with the spindle lock.

- Optimisation (**HOS**) not only reduces the need for wheel weights (matching), but also ensures smooth ride of the car.
- 6 balancing modes, 5 of which for alloy rims
- 4 user profiles
- Pedal-operated mechanical spindle lock
- PAX mode
- MZV-4 cone adaptor with quick-clamping nut
- Cones with dia. 42-77 mm, 72-99 mm, 96-116 mm
- Spacer
- Rim width callipers, universal weight pliers, and ART adhesive weight removing tool.
- Wheel guard for wheel dia. up to 950 mm

### Additional features of wheel balancer VAS 6308:

- 17" TFT flat screen using pictorials to make usage more operator-friendly. Vehicle data can be handled via **asanetwork**.
- The embedded PC is latest PC technology.
- 9 user profiles

## Wheel balancers



### VAS 6309

- Includes the patented virtual plane measurement technique (**VPM**) which ensures absolutely accurate results and which is insensitive to ambient conditions.
- Monitor-like LC display using pictorials for intuitive and optimised operator guidance.
- Optimum work place in functional design featuring a large weight tray, slide-in wheel guard and storage capacity for clamping adaptors.
- Automatic input of distance rim/machine, rim diameter and rim width with the **3D SAPE** gauge arm.
- Weights are fitted to the wheel in 12 h position using the **geodata gauge** arm. After measurement the wheel stops automatically in the correction plane. Including rim lighting system and mirror for convenient relocation of weight position.
- The automatic stop system (**ASS**) retains the geodata gauge arm in the previously stored position.
- The split-weight mode (**HSP**) allows to hide adhesive weights behind spokes.
- Optimisation (**HOS**) not only reduces wheel weights (matching), but also ensures smooth ride of the car.

- 6 balancing modes, 5 of which for alloy rims
- 9 user profiles
- Pedal-operated electromagnetic spindle lock
- PAX mode
- Rim width callipers, universal weight pliers, and ART adhesive weight removing tool.
- MZV-4 cone adaptor with quick-clamping nut
- Cones with dia. 42-77 mm, 72-99 mm, 96-116 mm, spacer

### Additional features of wheel balancer VAS 6310:

- 17" TFT flat screen with clearly structured operator guidance and pictorials
- Compatible to **asanetwork**

### VAS 6420

Clamp the wheel, close the guard, all wheel data is detected automatically and measurement begins without any need for the operator to touch the wheel. That's how quick and convenient professional wheel balancing can be.

- Digital wheel balancer with electro-mechanical power clamp device
- Special scanner for non-contact automatic input of all wheel data
- 17" TFT flat-screen monitor
- Adhesive weight placement with patented geodata gauge arm and wheel weight clamp for adhesive weights in 12 h position, or in 5 h position using a laser pointer
- A single key operation is enough to accomplish this previously tedious job of behind-the-spokes placement of wheel weights.
- The virtual plane measurement technique (VPM) ensures accurate results and is insensitive to ambient conditions.
- In optimisation mode possible rim run-out is opposed to the heavy spot of the tyre
- Automatic selection of balancing mode
- Compatible to **asanetwork**

## Premium balancer with diagnostic function



### Additional features of VAS 6311:

- Close the wheel guard and all wheel data is detected automatically – even rim run-out is measured without need for the operator to touch the wheel.
- Three laser units with CCD cameras are integrated in VAS 6311.
- If, however, the preset threshold values for radial run-out of the tyre/ rim assembly have been exceeded, VAS 6311 turns into a diagnostic device. It automatically measures radial and lateral run-out of the rim, clearly determining the cause of run-out.
- The laser/camera assembly performs a variety of geometric measurements of the complete wheel assembly, the rim and the tyre during the measuring run. The measured results are interpreted by the wheel balancer's on-board embedded PC to improve the wheel running conditions.
- The operator is guided step by step through the easily understandable matching procedure where the tyre is readjusted relative to the rim so that run-out of tyre and run-out of rim compensate for each other, thus improving ride performance and ride quality.



- With every measurement in optima mode tyre tread depth is measured automatically. An indication comes up on the screen whether tread depth is OK, critical, or out of tolerance with respect to a preset threshold.
- When a rim is clamped on VAS 6311 and measurement is started, the machine will recognise at once that it is a rim only and measure automatically radial and lateral run-out of the rim. The measured data plus the high spot of the rim are viewed on the screen.
- If a car pulls to the side although wheel alignment was carried out, the cause often is related to tyre conicity. Owing to the OptiLine kit, that is the feature for balancing and optimising a set of wheels, the data of up to five wheels can be measured and saved, and used by the software to

determine the tyre pull index.

The machine will propose the best possible position for each wheel on the vehicle so that tyre pull is compensated for axle by axle.

- Cones Ø 42–77 mm, Ø 72–99 mm, Ø 96–116 mm
- Spacer
- Adhesive weight removing tool
- Storage pegs for clamping adaptors left and right
- Wheel guard for up to 950 mm diameter
- OptiLine kit
- Optional accessories for accurate clamping of wheels: stepped centring ring (centre bore dia. 57 mm and 71.6 mm) and stud-hole flange (pitch circle dia. 5 x 100/112/120/130 mm; 5 bolts 80 mm long)



## Technical Data and Accesories

Technical Data							
		VAS 6307	VAS 6308	VAS 6309	VAS 6310	VAS 6420	VAS 6311
Rim centre bore dia $\varnothing$ mm		43-116	43-116	43-116	43-116	43-116	43-116
Shaft diameter	mm	40	40	40	40	40	40
Measuring speed	rpm	200	200	200	200	200	200
Rim width	inch	1-20	1-20	1-20	1-20	1-20	1-20
Rim diameter	inch	8-25	8-25	8-25	8-25	14-26	14-26
Max. wheel width	mm	530	530	530	530	530	530
Max. wheel diameter	mm	950	950	950	950	950	950
Max. wheel weight	kg	70	70	70	70	70	70
Dimensions (WxDxH)	mm	1285x1130x1765	1385x1130x1765	1365x1200x1375	1365x1200x1700	1320x915x1700	1495x1330x1740
Weight	kg	130	147	148	153	160	217
Power supply	V	200-240, 1 ph / 50 / 60 Hz					

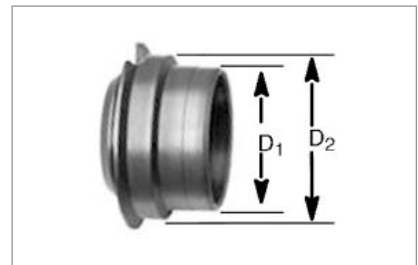
## Accessories



4026401 – Light-truck Kit with spacer, dia 112-168 mm



4029029 – Stud-hole flange FP VAG with circle dia. 5x100/112/120/130 mm



30344 – Tapered centering cone dia. D1 = 57 mm, D2 = 71.6 mm

Standard equipment	VAS 6307	VAS 6308	VAS 6309	VAS 6310	VAS 6420	VAS 6311
Patented virtual plane measurement <b>VPM*</b>	•	•	•	•	•	•
Automatic input of distance + diameter + width – <b>3D SAPE</b>	•	•	•	•		
Automatic input of all wheel data by non-contact scanning					•	•
Automatic selection of balancing plane*						•
<b>TFT</b> flat-screen monitor		•		•	•	•
Gauge arm with patented weight clamp *	•	•				
Automatic selection of balancing mode*					•	•
<b>geodata</b> gauge arm*			•	•	•	•
<b>ASS</b> automatic stop system for geodata gauge arm			•	•	•	•
Split-weight mode <b>HSP*</b>	•	•	•	•	•	•
PAX mode	•	•	•	•	•	•
Automatic braking after measurement	•	•	•	•	•	•
Automatic orientation into 12 h correction position after measurement		•	•	•	•	•
Geometric matching *						•
Pedal-operated spindle lock	•	•	•	•	•	•
Multiple user profile	•	•	•	•	•	•
Motor drive with V belt for constant speed	•	•	•	•	•	•
Optimisation mode <b>HOS</b>	•	•	•	•	•	•
Rim lighting system with mirror			•	•	•	
Electromechanical power clamp device*	optional	optional	optional	optional	•	•
Embedded PC technology		•		•	•	•
Compatible to asanetwork		•		•	•	•
Wheel guard	•	•	•	•	•	•

\*patented / patent pending

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Part of the machines is illustrated with optional extras available at extra cost.  
Technical modifications reserved.

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